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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,972	09/15/2003	Hiromichi Hara	00862.023232	8559

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EXAMINER

FULLER, RODNEY EVAN

ART UNIT PAPER NUMBER

2851

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,972

Applicant(s)

HARA, HIROMICHI

Examiner

Rodney E Fuller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Rodney Fuller
Primary Examiner

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 10, 12, 14 and 15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 8-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kemper, et al. (US 2003/0048428).

Regarding claim 1, Kemper discloses "a partition wall which encloses a path of exposure light and isolates the path from surroundings (paragraph 0012, lines 1-3); and a connecting member (paragraph 0012, line 4) in a tubular form (paragraph 0014, lines 4-6) which connects a

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structure supported independently of said partition wall and said partition wall and sustains airtightness (paragraph 0011, lines 11-13) in a space enclosed with said partition wall, wherein a section of said connecting member, taken in a direction perpendicular to an axis of said connecting member, has a three-dimensional portion (paragraph 0014, lines 4-6).”

Regarding claim 2, Kemper discloses “wherein the section of said connecting member has a plurality of three-dimensional portions (Fig. 2, ref.# 22).”

Regarding claim 3, Kemper discloses “wherein said connecting member connects the structure and said partition wall in an axially compressed state.” (paragraph 0016, lines 19-21)

Regarding claim 8, Kemper discloses “wherein the tubular form includes a structure which has a polygonal section with a three-dimensional portion.” (paragraph 0049, lines 4-7)

Regarding claim 9, Kemper discloses “wherein the tubular form includes a structure which has a circular section with a three-dimensional portion.” (paragraph 0049, lines 4-7)

Regarding claim 10, Kemper discloses “wherein the structure is supported by a vibration isolating mechanism (paragraph 0013, lines 1-16), and said partition wall is supported by a structure (Fig. 2, ref.# 27) which can transmit vibrations to said partition wall.”

Regarding claim 11, Kemper discloses “wherein said partition wall (Fig. 2, ref.# 21) is supported by a support member (Fig. 2, ref.# 28) which receives vibrations from a floor.”

Regarding claim 12, Kemper discloses “wherein said partition wall (Fig. 5, ref. 51) connects to a second structure other than the structure through a second connecting member (Fig. 5, ref.# 52), and the second connecting member has the same structure as a structure of said connecting member.”

Regarding claim 13, Kemper discloses “wherein the structure (Fig. 2, ref.# 21) is supported by a structure (Fig. 2, ref.# 28) which can transmit vibrations to the structure, and said partition wall is supported through a vibration isolating mechanism (paragraph 0013, lines 1-16).”

Regarding claim 14, Kemper discloses “wherein a stage (paragraph 0037, line 9) is arranged in the space enclosed with said partition wall.” (paragraph 0037, lines 6-11)

The method steps of claim 15 are met by the operation of Kemper as applied to claims 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemper, et al. (US 2003/0048428).

Regarding claims 4 and 5, Kemper discloses that the connecting member is made of an “elastic material” (paragraph 0050, line 2). However, Kemper does not specifically disclose that the material is “selected from the group consisting of resin and rubber” (claim 4) or “made of fluororubber” (claim 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use resin, rubber or fluororubber as a material for the connecting member, since it has been held to within the general skill of a worker in the art to select known

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materials on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416.

Regarding claim 6, Kemper discloses that the connecting member should be “sufficiently thin” (paragraph 0014, line 8). However, Kemper does not specifically disclose “wherein said connecting member is made of a material having a thickness of not more than 2 mm.” It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a material having a thickness of not more than 2mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.” *In re Aller*, 105 USPQ 233.

Regarding claim 7, Kemper does not specifically discloses “wherein said connecting member is arranged to be resistant to a gage pressure of not more than 1 MPa.” However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a material wherein the connecting member may be “arranged to be resistant to a gage pressure of not more than 1 Mpa,” since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.” *In re Aller*, 105 USPQ 233.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Taniuchi, et al. (US 6,727,981), Phillips, et al. (US 6,614,508), Iwasaki, et al. (US 6,621,556) and Arakawa (US 6,757,048) each disclose an exposure apparatus with a partition

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wall to enclose an optical path and a connecting member that sustains airtightness in a space enclosed with the partition wall.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller
Primary Examiner
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A handwritten signature in black ink, appearing to read 'R. E. Fuller', is written over the printed name of the examiner.

September 22, 2004